



INTERNATIONAL
TRADE
ADMINISTRATION

Coal News and Trends

June 2008

Upcoming Coal and Mining Web-Based Seminars:

For additional information on the 2008 Coal and Mining Webinar Series and registration procedures, please contact Shannon Fraser (Shannon.Fraser@mail.doc.gov, 202-482-3609) or Steve Murray (Steve.Murray@mail.doc.gov, 412-644-2819). Please note that these sessions will be recorded and disseminated to registrants after each event.

➤ **'Opportunities for U.S. Companies in the Coal/Mining Sectors of South Africa'**
June 5, 11:00 am Eastern Time

Led by Johan van Rensburg (Commercial Service-Johannesburg)

The June 5 South Africa Coal/Mining webinar will provide U.S. companies with an overview of the South African coal and mining market as well as highlights on commercial opportunities for U.S. companies. Registration details for this event are available at: <http://www.buyusa.gov/pittsburgh/coalandminingwebinars.html>

Upcoming Events:

- **Bluefield Coal Symposium, August 26-27, Bluefield, WV**
The Bluefield Coal Symposium will provide an overview of 1) industrial coal mine safety programs, 2) regional mining legislation, and 3) recent mining technology developments. For additional information on the program agenda, please refer to <http://www.bluefieldchamber.com/csinformation.htm>
- **MINExpo International, September 22-24, Las Vegas, NV**
Occurring every four years, the MINExpo event will take place from September 22-24 in Las Vegas and will include educational seminars, mining equipment displays, and optional site visits. The Department of Commerce will coordinate foreign buyer delegations to attend the conference and will arrange for one-on-one meetings between Foreign Service coal and mining trade specialists and U.S. company representatives to discuss the expansion of business opportunities in a targeted overseas market. For additional information, please refer to <http://www.minexpo.com/tours.shtm?id=2> or contact Shannon Fraser at Shannon.Fraser@mail.doc.gov, 202-482-3609.
- **International Pittsburgh Coal Conference, September 29-October 2, Pittsburgh, PA**
The Twenty-Fifth Annual International Pittsburgh Coal Conference will focus on environmental emissions issues and technologies surrounding the continued use of coal and the development of future coal-based energy plants to achieve near-zero emissions of pollutants. For additional information on this year's program, please refer to <http://www.engr.pitt.edu/pcc/2008%20Conference.htm>

Recent Events:

International Trade Administration Coal Industry Trade Specialists Lead Indian Delegation to the 2008 Coal Prep Conference

Shannon Fraser, Office of Energy and Environmental Industries

As the world's third largest coal consumer, India holds vast domestic coal reserves located primarily in the northeastern states of Jharkhand, Orissa, Chhattisgarh, Assam, and Meghalaya. The proven geological coal reserves within India are currently estimated at 103 billion tons. Total coal output in the 2006-2007 period amounted to 426 million tons. India's total coal output will increase to 731 million tons by 2012.

While India's domestic coal reserves provide for over half of India's overall energy production, the high ash content of India's coal requires processing and cleaning prior to the combustion stage of power production. Coal preparation technologies, also known as coal beneficiation, are a pre-combustion form of clean coal technology that removes sulfur, ash, dirt, and other impurities prior to the combustion of coal in a power plant. This form of pre-combustion clean coal technology allows for coal to burn cleanly and efficiently.

In the United States, over 345 preparation plants are currently in operation which clean more than seventy percent of domestically mined coal. India's 48 coal washeries have a combined cleaning capacity of 101 metric tons of coal per year. New coal preparation facilities are needed within India, and older washeries are in need of modernization and upgrades. Hence, U.S. coal preparation companies are taking increasing interest in the opportunities available in India's coal preparation sector.

To partner India's coal preparation requirements with U.S. coal preparation technology and expertise, a number of coal industry trade specialists from the International Trade Administration (ITA) coordinated a delegation of representatives from Coal India, Ltd. to take part in the Coal Prep Conference in Lexington, Kentucky from April 28 to May 1. The partnership between ITA and Coal India, Ltd. for the Coal Prep Conference was formed under the auspices of the Asia Pacific Partnership, Coal Mine Task Force.

The Asia Pacific Partnership (APP) serves as a voluntary framework for international cooperation to accelerate the development and deployment of clean energy technologies, while promoting sustainable economic growth and poverty reduction in emerging economies. The APP countries include Australia, Canada, China, India, Japan, Korea, and the United States. The APP Coal Mine Task Force is currently chaired by the United States and co-chaired by India.

At the first APP Coal Beneficiation Workshop, held in Ranchi, India in August 2007, representatives from Coal India, Ltd. highlighted India's great need for advanced coal preparation technologies. The Coal Prep Conference served as a venue for Coal India, Ltd. representatives to meet with U.S. companies and to apply U.S. coal preparation technologies to the Indian sectors of coal preparation and power production.

The delegation consisted of Chief Engineers and Deputy Chief Engineers representing three of the nine subsidiaries of Coal India, Ltd. Coal India, Ltd. is responsible for 1) the identification and exploration of coal fields; 2) the extraction of coal reserves; 3) the construction of underground and surface mines; and 4) the development of coal preparation facilities. While at the conference, the delegates attended technical sessions on 1) Modern Coal Dewatering Technologies; 2) Operation and Maintenance Guidelines for Screenbowl Centrifuges; and 3) U.S. Department of Energy Coal Conversion Projects. Additional technical sessions at the conference highlighted topics pertaining to coal transportation, utility business development, and coal preparation plant financing. As part of the technical program, ITA and Coal India, Ltd. officials provided an overview of 'Opportunities in India's Coal Beneficiation Sector' attended by over fifty U.S. coal preparation industry representatives.

The delegates met with the Coal Preparation Society of America and individual U.S. coal preparation companies specializing in coal screening, crushing, and separation technologies. The University of Kentucky hosted the delegates for a tour of the coal analysis laboratories located at the Department of Mining Engineering. ITA representatives coordinated with the State of West Virginia for an evening reception held in honor of the Indian delegation. Following the conference program, ITA and Coal India, Ltd. representatives visited the James River Coal Preparation facility in Kentucky on May 1 and the Cardinal Coal Preparation facility in West Virginia on May 2. The Coal Preparation Society of America and ITA representatives coordinated the two site visits for the delegation. Following the return of the Coal India, Ltd. delegates to India, the ITA commercial specialist from Kolkata met with U.S. mining, manufacturing, and clean coal technology companies in West Virginia and Pennsylvania.

By August 2008, one subsidiary of Coal India, Ltd., Central Coalfields Ltd. will put forward a tender for a 10 million ton coal beneficiation plant. Additional tenders are scheduled to be put forward by Coal India, Ltd. within the year. Coal India, Ltd. is anticipating new coal preparation plant capacity to total 50 million tons once all the projects are finalized. As the upcoming tender represents the first build-operate-maintain (BOM) model for coal preparation plant development within India, the initial project will serve as a model for subsequent coal preparation facilities.

Throughout 2008, ITA trade and energy representatives will continue the partnerships with coal and mining officials in India. ITA's coal and mining trade specialists are currently arranging for international delegations to attend the MINExpo Conference, scheduled for September 22-24 in Las Vegas. Foreign Commercial Service trade specialists in Kolkata anticipate a large delegation from India to attend this event and meet with U.S. companies. Moreover, the International Mining and Machinery Exhibition (IMME) will take place from November 5 to 8 in Kolkata. This event serves as India's foremost coal and mining conference. ITA commercial specialists are coordinating a USA Pavilion for the event, thereby providing a key opportunity for U.S. coal and mining companies to meet with officials from India's coal and mining sector. As Coal India, Ltd. is based in Kolkata, U.S. coal and mining company representatives will have a key opportunity to meet with leading representatives from India's coal and mining sector at the conference. *For additional information on the upcoming MINExpo and IMME events, please contact Shannon Fraser at Shannon.Fraser@mail.doc.gov or (202) 482-3609.*

The International Trade Administration Program at the 10th Annual Electric Power Conference

Shannon Fraser, Office of Energy and Environmental Industries

'Electric Power is Coal. It is Nuclear. It is Gas. It is Renewables.' This Electric Power Conference message for 2008 clearly highlighted that all U.S. energy sectors contribute to powering America's businesses and homes. According to 2007 statistics from the Energy Information Administration, a variety of fuel sources contribute to U.S. electricity generation: coal (49%), gas (20%), nuclear (19%), hydro (7%), oil (2%), and other sources (3%). These figures emphasize the fact that no one power source provides for the majority of U.S. electricity generation. All energy sectors continue to be key contributors to U.S. power production.

ITA energy and trade specialists from the Office of Energy and Environmental Industries (OEEI) and Commercial Service-Baltimore developed an international program of events as part of the Electric Power Conference, which took place at the Baltimore Convention Center from May 5 to 8. While the overall Electric Power Conference program focused on recent developments and future challenges in the U.S. power generation sector, the ITA program highlighted the government services and programs available to U.S. firms to increase their competitiveness in the U.S. power generation sector, both domestically and internationally.

Working closely with the conference organizers, The Trade Fair Group, ITA energy and trade specialists collaborated with interagency counterparts, financial institutions, and private sector companies to finalize the ITA program for the conference, which included 1) a seminar on 'Exporting U.S. Power Technologies and Equipment,' 2) panel presentations by OEEI energy and environment specialists highlighting recent U.S. energy policies, and 3) an International Trade Booth for U.S. companies to meet with ITA's trade specialists and discuss export strategies.

On May 5, ITA trade specialists led the 'Exporting U.S. Power Technologies and Equipment' seminar which provided U.S. small and medium-sized companies with insight on 1) U.S. government export programs and services; 2) regional opportunities for U.S. power technologies; 3) financing of overseas energy projects; and 4) the legal issues of trading with international partners. Mr. Greg Raty (Vice President of Slade, Inc.) and Mr. Gary Hilberg (Vice President of Sales at Turbine Air Systems) shared their experiences on utilizing the services provided by ITA and financial and legal institutions to expand their sales in overseas markets. Representatives from the U.S. Trade and Development Agency, Export-Import Bank, BB&T Bank, U.S. Small Business Administration, ITA's Office of Intellectual Property Rights, and the law firm of Porter, Wright, Morris & Arthur imparted their insight as part of the export seminar.

To advance U.S. competitiveness of energy and environmental firms in both overseas and domestic markets, representatives from ITA's Office of Energy and Environmental Industries (OEEI) gave presentations as part of the technical sessions of the conference. Specifically, Shannon Fraser, OEEI's clean coal technology specialist, provided an overview of ITA's recent Competitiveness Paper on 'Potential Exports of U.S. Clean Coal Technologies Through 2030' as part of the panel session on New Coal Projects and Challenges. Brian O'Hanlon, OEEI's renewable energy expert, highlighted the state

and federal programs that are promoting the adoption of renewable energy technologies worldwide. Frank Caliva, who serves as OEEI's energy efficiency and biofuels specialist, spoke on the connection of renewable energy generation to the national grid. These three sessions highlighted OEEI's policy role in advancing the competitiveness of the U.S. energy and environment sectors in domestic and international markets.

The trade specialists from the Commercial Service office in Baltimore coordinated the International Trade Booth at the conference, which served as a venue for U.S. small and medium companies to meet with ITA trade and export specialists and to develop a strategy either to commence the exportation of their company's products and services to overseas markets (for companies new to exporting) or to expand upon existing overseas market opportunities (for companies that have previously exported and are looking for new markets). The trade and export specialists counseled U.S. companies on ITA's advocacy and exporting programs, tailored market research services, one-on-one business matchmaking programs, and company promotion services. The ITA representatives met with over seventy-five U.S. companies as part of the services offered at the ITA trade booth.

ITA's collaborative endeavors with the conference organizers, The Trade Fair Group, have furnished U.S. small and medium companies in the energy and environmental sectors with resources on how to advance their business opportunities, both domestically and internationally. The next Electric Power Conference is scheduled for May 12-14, 2009 in Chicago. *For additional information on ITA's Electric Power Program of Event, please contact Shannon Fraser at Shannon.Fraser@mail.doc.gov or (202) 482-3609.*

Policy Analysis:

DOE Launches 30th Annual University Coal Research Competition **Projects Sought to Explore Innovative Concepts for Cleaner Use of American Coal** http://fossil.energy.gov/news/techlines/2008/08015-UCR_Competition_Begins.html May 19, 2008

Washington, D.C. - The U.S. Department of Energy (DOE) has released a funding opportunity announcement calling on U.S. colleges and universities to propose new projects to enhance the long-term use of coal. The announcement launches the 30th year of DOE's University Coal Research (UCR) program, the Department's longest-running student-teacher research grant program.

Since the program's inception in 1979, nearly 1,765 students have received hands-on research experience investigating long-term solutions for clean and efficient use of coal. The program supports DOE's continued commitment to improving the environmental performance of our Nation's most abundant energy resource.

This year, the program will make available \$2.4 million to fund projects with a maximum of \$300,000 per project. Each project will involve one or two colleges or universities and will extend over 36 months. Research proposals are being sought in three areas of interest:

Computational Energy Sciences: Applications are being sought for multiphase flow research to complement ongoing NETL-funded modeling research and for projects to develop process/equipment co-simulations of highly efficient, near-zero-emission fossil energy plants.

Material Science: Applications are being sought for new materials ideas and concepts that stretch beyond the current state of the art for fossil energy applications. Applications are also sought for the development of computational tools and simulations that will reliably predict properties of materials for fossil energy systems in advance of fabrication.

Novel Materials for Sensing or Monitoring in Extreme Environments of Fossil Energy Systems: Innovations are sought for the development of novel sensor materials and devices to measure process parameters in the corrosive, high-temperature (>500 degrees Celsius), high-pressure (250 pounds per square inch) conditions found in fossil energy systems. Proposals are due by June 10, 2008.

The National Energy Technology Laboratory, which implements the program for the Energy Department, will name the winning projects in December 2008.